AMENDMENTS TO THE CLAIMS:

The following listing of the claims replaces all previous versions, and listings, of the claims. Please amend claims 2 to 5 and 7 to 12 and add new claims 23 to 31 as follows:

1. (previously presented) A data carrier having a holographic data memory in a form of a volume hologram comprising:

a core layer comprising the holographic data memory; and

an adjacent layer laminated to the core layer, the adjacent layer having an inner surface, the inner surface facing the core layer and having a roughness before lamination to the core layer that causes a wavelength shift of the image reconstructed from the volume hologram.

2. (currently amended) A [[The]] data carrier comprising ~~according to claim 1~~,

a holographic data memory consisting of a core layer, said core layer containing regions of different refractive index from which a holographic image may be reconstructed by exposure to incident light; and

an adjacent layer laminated to said core layer, said adjacent layer having an inner surface facing said core layer, said inner surface having an ~~wherein the the~~ average roughness before lamination to the core layer of ~~the inner surface is~~ about 5 μm to 25 μm so as to result in

a wavelength shift of the holographic image reconstructed from said core layer of about 20 nm.

3.(currently amended) The data carrier according to claim [[1]] 2, wherein the ~~roughness of the~~ inner surface [[is]] has a stochastically distributed roughness.

4. (currently amended) The data carrier according to claim [[1]] 2, wherein the inner surface has ~~includes~~ a roughness profile having a regular jagged relief.

5. (currently amended) The data carrier according to claim [[1]] 2, wherein the adjacent layer includes a first area having a first roughness profile and a second area having a second roughness profile, wherein the first roughness profile is different from the second roughness profile.

6. (previously presented) The data carrier according to claim 5, wherein the first and second areas display information in the form of numbers, letters, geometric forms or images.

7. (currently amended) The data carrier according to clam [[1]] 2, wherein the adjacent layer comprises at least one ~~thermoplastically~~ processible thermoplastic ~~plastic~~ material.

8. (currently amended) The data carrier according to claim [[1]] 2, wherein the adjacent layer comprises a paper-like material having at least one plastic laminated layer.

9. (currently amended) The data carrier according to claim [[1]] 2, wherein the adjacent layer is imprinted.

10. (currently amended) The data carrier according to claim [[1]] 2, wherein the holographic data memory includes at least one area that is locally shrunken or swollen.

11. (currently amended) The data carrier according to claim 10, wherein said [[the]] at least one area that is shrunken or swollen is subjected to a temperature ~~includes a~~ gradient towards [[the]] a data carrier surface.

12. (currently amended) The data carrier according to claim [[1]] 2, wherein an increased roughness of said ~~the directly~~ adjacent layer corresponds to an increased shift of the wavelength of the holographic ~~reconstructed~~ image to shorter wavelengths.

Claims 13 to 17. (canceled)

18. (currently amended) The data carrier according to claim 7, wherein the ~~thermoplastically~~ processible ~~plastic~~ thermoplastic material includes polycarbonate (PC).

19. (previously presented) A method of manufacturing a data carrier having a holographic data memory in a form of a volume hologram, comprising the steps of:

providing a core layer having a first surface and the holographic data memory;

providing an adjacent layer having an adjacent surface;

producing a roughness on the adjacent surface of the adjacent layer; and

laminating the adjacent layer and the core layer such that the adjacent surface of the adjacent layer is in contact with the first surface of the core layer,

wherein the roughness produced on the adjacent surface causes a wavelength shift of the image that is reconstructed from the volume hologram.

20. (currently amended) ~~The method of claim 19~~[[,]] A method of manufacturing a data carrier with a holographic data memory, said method comprising the steps of:

a) providing a holographic data memory consisting of a core layer, said core layer containing regions of different refractive index from which a holographic image may be reconstructed by exposure to incident light, said core layer having a first surface;

b) providing an adjacent layer having an adjacent surface with a roughness; and

c) then laminating the adjacent layer to the core layer so that the adjacent surface of the adjacent layer is in contact with the first surface of the core layer;

wherein the adjacent surface of the adjacent layer has ~~producing step produces~~ an average roughness of about 5 μm to 25 μm so as to produce a wavelength shift of the holographic image reconstructed from said core layer of at least 20 nm.

21. (currently amended) The method according to [[of]] claim [[19]] 20, ~~further comprising the step of selecting an area of the adjacent surface~~[[,]] wherein ~~the producing step includes impressing~~ a regular relief is impressed onto a [[the]] selected area of the adjacent surface through at least one of thermal and mechanical deformation.

22. (currently amended) The method according to [[of]] claim 21, wherein the selected area corresponds ~~corresponding~~ to at least one of a geometric form, a number, a letter, and an image.

23. (new) A data carrier comprising:

a holographic data memory consisting of a core layer of light-sensitive material in which regions of different refractive index are inserted by exposure to coherent radiation of a certain wavelength so that a holographic image may be reconstructed by refraction of incident light at said regions and interference within reflected light; and

an adjacent layer laminated to said core layer whose inner surface facing said core layer has a regular or irregular roughness pattern so as to shift the wavelength of said holographic image reconstructed from said core layer by said incident light.

24. (new) The data carrier according to claim 23, wherein said inner surface has an average roughness before lamination to the core layer of about 5 μm to 25 μm so as to result in a wavelength shift of the holographic image reconstructed from said core layer of about 20 nm.

25. (new) The data carrier according to claim 23, wherein the adjacent layer includes a first area having a first roughness profile and a second area having a second roughness profile, wherein the first roughness

profile is different from the second roughness profile, and wherein the first and second areas display information in the form of numbers, letters, geometric forms or images.

26. (new) The data carrier according to clam 23, wherein the adjacent layer comprises at least one thermoplastic material.

27. (new) The data carrier according to claim 26, wherein the at least one thermoplastic material comprises polycarbonate.

28. (new) A method of manufacturing a data carrier comprising the steps of:

a) providing a holographic data memory consisting of a core layer of light sensitive material in which regions of different refractive index have been inserted by exposure to coherent radiation of a certain wavelength so that a holographic image may be reconstructed by refraction of incident light at said regions and interference within reflected light; and

b) providing an adjacent layer having an adjacent surface provided with a regular or irregular roughness; and

c) laminating said adjacent layer and said core layer so that said adjacent surface of said adjacent layer is firmly connected with a first surface of said core layer;

and a wavelength shift of said holographic image reconstructed from said holographic data memory by exposure to the incident light is observed.

29. (new) The method according to claim 28, wherein the adjacent surface has an average roughness of about 5 μm to 25 μm so that said wavelength shift of said holographic image reconstructed from said core layer is about 20 nm.

30. (new) The method according to claim 28, further comprising increasing said roughness of said adjacent layer so as to increase said wavelength shift of said holographic image to shorter wavelengths.

31. (new) The method according to claim 28, wherein a regular relief is impressed onto a selected area of said adjacent layer through at least one of thermal and mechanical deformation.